

- [54] **METHOD FOR EDITING A GRAPHIC OBJECT IN AN INTERACTIVE DRAW GRAPHIC SYSTEM**
- [75] Inventors: **Barbara A. Barker**, Round Rock; **Irene H. Hernandez**, Austin, both of Tex.
- [73] Assignee: **International Business Machines Corporation**, Armonk, N.Y.
- [21] Appl. No.: **781,621**
- [22] Filed: **Sep. 30, 1985**
- [51] Int. Cl.⁴ **G09G 1/14**
- [52] U.S. Cl. **340/747; 340/731; 340/751; 340/724**
- [58] Field of Search **340/747, 731, 706, 707, 340/709, 710, 723, 724, 727, 751**

[56] **References Cited**

U.S. PATENT DOCUMENTS

- 4,127,349 11/1976 Okor 340/747
- 4,555,699 11/1985 Citron et al. 340/706
- 4,559,533 12/1985 Bass et al. 340/747
- 4,586,036 4/1986 Thomason et al. 340/747
- 4,622,545 11/1986 Atkinson 340/734

OTHER PUBLICATIONS

- Kaehler et al.—“Macpaint™”, Apple Computer Corp. 1983.
- “Diagraph”, Computer Support Corp. 1984, pp. 22–25.
- “The Lisa Computer System”—Gregg Williams, Byte Publication—Feb. 1983—pp. 33–50.
- Casale et al.—“An Overview of Analytic Solid Model-

ing” IEEE Computer Graphics & Applications—Feb/1985, pp. 45–56.

A. McCaskill and J. S. Wang—“Adding a Joint into a Graphic Object”—IBM Technical Disclosure Bulletin—vol. 27, No. 10B, Mar. 1985, pp. 6055–6056.

A. McCaskill and J. S. Wang—“Relocating the Joint of a Graphic Object”—IBM Technical Disclosure Bulletin—vol. 27, No. 10B, Mar./1985—p. 6052.

Primary Examiner—Gerald L. Bigance

Assistant Examiner—Mahmoud Fatahi-Yar

Attorney, Agent, or Firm—Richard E. Cummins; James H. Barksdale, Jr.

[57] **ABSTRACT**

A method for editing graphic objects in an interactive draw graphic system, in which the operator is allowed to select one of two editing modes which results in a graphic object being either redefined or remaining as is when a graphical editing action is applied only to a portion (sub-object) of the object. In the REDEFINE mode, the graphic editing action e.g., stretch, shrink, scale down, rotate, etc., applied to a sub-object results in the line segments of the object that are attached to the ends of the sub-object to be redrawn or “rubber-banded” as the sub-object is edited (moved). In the AS-IS mode only the sub-object is affected by the graphic editing action and the rest of the object is not altered.

7 Claims, 18 Drawing Figures

